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An Examination of the Utilization of Artificial Intelligence Technologies by Advertising Agencies*

Reklam Ajanslarının Yapay Zekâ Teknolojilerini Kullanımlarına İlişkin Bir İnceleme

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Araştırma Makalesi Research Article

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ABSTRACT

This article aims to discover the mechanisms behind the adoption and acceptance of AI in advertising industry in Turkey. Semi-structured interviews reflecting technology acceptance literature conducted with agency practitioners to discover the usages and conditions of AI supported applications. Participants are selected in accordance with convenience and snowball sampling methods. The results provide important insights into four main strands of the literature: Technology usefulness, ease of use, attitudes toward technologies and barriers preventing and restricting the use of technologies. It is understood that practitioners effectively utilize AI in their business processes highlighting its contribution to efficiency in creative production. While technologies are being actively utilized, the process of understanding and exploring is still ongoing in the background. In line with the literature, agency practitioners point out the skepticism that exists among advertisers. It is noticable that as a result of finding AI tools useful and easy to use, overall attitude of participants toward AI tend to be positive. Participants asserted that they do not have any concerns about being replaced by AI. Their confidence on this matter seems to be based on the idea that AI could be most efficient in cooperation with human intelligence.

Keywords: Technological Usefulness, Ease of Use, Attitudes Toward AI, Barriers, Advertising and AI.

ÖZ

Bu makale, Türkiye'de reklam sektöründe yapay zekânın benimsenmesi ve kabul edilmesinin arkasındaki mekanizmaları keşfetmeyi amaçlamaktadır. Çalışmada yapay zekâ destekli uygulamaların kullanım alanlarını ve kullanım koşullarını keşfetmek için ajans uygulayıcıları ile teknoloji kabul modelinden yola çıkılarak yarı yapılandırılmış görüşmeler gerçekleştirilmiştir. Katılımcılar, kolayda ve kartopu örnekleme yöntemlerine uygun olarak seçilmiştir. Araştırma sonuçları, literatürün dört ana başlığına ilişkin önemli içgörüler sağlamaktadır. Bunlar: Teknolojik kullanışlılık, kullanım kolaylığı, teknolojilere yönelik tutumlar ve teknolojilerin kullanımını engelleyen ve kısıtlayan engellerdir. Reklam uygulayıcılarının, yaratıcı üretimlerde yapay zekânın verimliliğe olan katkısını vurgulayarak iş süreçlerinde bu teknolojiyi etkin bir şekilde kullandıkları anlaşılmaktadır. Ancak teknolojiler aktif olarak kullanılırken, arka planda anlama ve keşfetme süreci hala devam etmektedir. Sonuçlar, literatürle uyumlu olarak, reklam ajansı çalışanları ile reklamverenler arasındaki şüpheci bir yaklaşıma işaret etmektedir. Yapay zekâ araçlarının faydalı ve kullanımının kolay bulunmasının bir sonucu olarak, katılımcıların yapay zekâya yönelik genel tutumlarının olumlu eğilimde olduğu dikkat çekmektedir. Katılımcılar, yapay zekâ tarafından işlerinden olma konusunda herhangi bir endişeleri olmadığını belirtmişlerdir. Bu konudaki güvenlerinin sebebi, YZ'nin ancak insan zekâsı ile işbirliği içinde en verimli haline ulaşabileceği fikrine dayanmaktadır.

Anahtar Kelimeler: Teknolojik Kullanışlılık, Kullanım Kolaylığı, YZ'ye Yönelik Tutumlar, Engeller, Reklam ve YZ.

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Introduction

Artificial Intelligence (AI) systems are rapidly spreading in our daily lives. Today, there is a general consensus that studies and research on AI will have a significant impact on society and radically change the business world (Leszczynski, Salamon & Zieliński, 2022). Artificial Intelligence can be explained as intelligence created by machines as opposed to natural intelligence and can be described as a device that perceives its environment and performs actions that maximize the chances of successfully achieving its goals (Yampolskiy, 2020). According to McCarty (2007), artificial intelligence is "the science and engineering of developing particularly intelligent computer programs. It is about the task of using computers to understand human intelligence. Intelligence is the computational part of the ability to achieve goals in the world. Different types and degrees of intelligence exist in humans, many animals and some machines. Intelligence involves mechanisms, and AI research has learned that computers perform some mechanisms and not others. If a task requires only mechanisms that are well understood today, computer programs can perform quite impressively on those tasks" (McCarty, 2007: 2-3).

In recent years, marketers and advertisers have been using AI-powered products to gain critical insights and improve campaign optimizations to drive more conversions. The recent surge in news about productive AI, especially when it comes to creative design, emphasizes the need to reconfigure the role of the human factor day by day. In recent years, marketers and creative teams have been experimenting with AI in areas ranging from user experience to ad inventory. One of these is interactive ads that are voice-activated and offer audio/visual experiences. These ads allow users to participate in the experience. However, it is emphasized that human-centeredness should not be forgotten in the use of these technologies and the importance of placing human reality at the center of campaigns.

Ed Yeoman, Creative Director of London-based branding and design agency Human After All, has observed how AI can be used at the ideation stage, taking verbal prompts or helping to imagine with visual prompts, such as a concept store that doesn't yet exist. The partnership between Jellyfish and Google includes "Optics", a proprietary service powered by Google Cloud Platform's Vision and Video APIs, which has the ability to analyze whether ads are performing in line with brand goals. As AI continues to evolve, creative teams can identify key elements in emotional content and select the most effective creative. Gabriel Cheung, Managing Creative Director of TBWA\Chiat\Day New York, states that it is possible for AI to push the boundaries of teams' thinking and that AI's ability to quickly generate "top of mind" ideas can evaluate the performance of teams in finding new and original ideas. It is also thought that AI is akin to a creative or strategic director role, where it can take on the role of inspiring people to take specific actions and presenting challenges. Di Wu, vice president of data science at Jellyfish Group, points out that AI is developing rapidly and offers many opportunities, but it also involves wild west scenarios. Wu emphasizes that AI is not only limited to ethics, but is also a business issue (Corbyn, 2023).

In the future, there is a debate on whether artificial intelligence will replace the human factor, put an end to many professions and eliminate professions involving automation. However, although some professions disappear with new inventions in each particular era, technological advances enable the emergence of many new professions. Many small and large companies around the world have already started investing in artificial intelligence. By 2025, 85 million jobs are expected to be replaced by artificial intelligence. However, it is also expected to create 97 million new jobs, more than it destroys. According to an O'Reilly survey, the sectors where AI is most readily accepted are technology and finance, while the sectors with the lowest acceptance are media, energy and defense (Pegg, 2023).

The advertising sector also continues to operate as a media field of study. The extent to which the

advertising sector adapts to artificial intelligence applications and its development process is a current problem, and research on the sector continues. This current study investigates to what extent advertising agencies in Istanbul, Turkey are adapting to the innovations offered by artificial intelligence technologies, what kind of a process they go through at the point of accepting these technological innovations and whether they include artificial intelligence in their business processes. In addition, the study also examines the difficulties and obstacles experienced by advertising agencies in this process, and if they have incorporated artificial intelligence into their business processes, at what stage they are at. In this context, eight advertising agencies selected by snowball sampling were interviewed. These agencies serve as media planning agencies, digital advertising agencies and creative agencies. In this qualitative study, semi-structured in-depth interviews were conducted to collect research data.

Literature Review

Applications of Artificial Intelligence in Advertising

Since 1994, when the first banner appeared on the scene, digital advertising has undergone a massive transformation, reshaping the advertising industry from the ground up. Over the last 25 years, this evolution has not only transformed the world of advertising, but also spawned a new field of academic research. If we consider interactive advertising as the first phase of digital advertising and programmatic advertising as the second phase, we are now in a phase where intelligent advertising is the third and most recent phase of digital advertising. It is important to understand that each new phase of digital advertising retains the valuable features of its predecessors while adding innovative features (Li, 2019:2).

In 2018, The International Conference on Intelligence Science and Advertising Development in Shanghai represented a significant step forward in exploring the rapidly evolving digital advertising space. To share the key takeaways from this conference, Advertising Journal has decided to publish a special section on artificial intelligence and advertising. It was hoped that these articles would inspire further research into intelligent advertising. Smart advertising is defined as consumer-focused, data-driven and algorithm-driven brand communication (Li, 2019:1). In this context, it would be correct to talk about computational advertising. Computational advertising, which refers to the use of information processing capabilities to analyze consumer behavior, personalize content, and deliver advertising information to (potential) consumers through various media and touchpoints, usually involves algorithms and mathematical methods using consumer behavior data such as online search habits and past browsing data. This approach represents a significant shift in advertising and offers marketers the opportunity to generate and optimize impact by delivering brand messages tailored to individuals and consumer segments (van Noort, Himelboim & Martin, 2020).

According to Yu (2021), these new techniques and methods are transforming the advertising industry. At the same time, there are many advantages of using these new techniques in advertising. These advantages are summarized as follows;

- Increased Efficiency: AI technology can provide increased efficiency and cost effectiveness by optimizing the process from ad creation to campaign management.
- Improved Targeting: AI allows marketers to target their ads more precisely and effectively by analyzing multiple user factors and platform-specific habits.
- Increased Creativity: AI can quickly generate new ad ideas and content, leading to more creative and engaging ads.
- Optimized Budget and Targeting: AI solutions can automatically optimize ad spend and targeting, improving campaign performance and budget effectiveness.

- Increased Impact and Reach: AI technology can help create audience-relevant ad content from a wide range of sources, increasing ad impact and information reach.

Today, companies use artificial intelligence to improve the efficiency of their advertising campaigns and collect user data, and AI technologies can be used in various forms in the ad creation process. Today, an example of an ad for Lexus that is fully scripted by AI is the Lexus ad. At present, however, the use of AI in the ad production process is not a very widespread industry and only a few companies are active in this field. The first company worth mentioning in this context is Make-a-Video, a neural network created by developers from Meta. This application allows the creation of short videos based on a short description. Among the famous works available on the official website are examples such as "a confused grizzly bear in a math class", "a knight on horseback in the countryside". Other examples of apps that offer advertisers the ability to create short videos include Google's Imagen Video and Make-a-Video. Soundify is an AI system that can add audio to videos without sound. However, there is still a need to increase the amount of stored audio data and improve the quality. IBM Watson Advertising offers various services to enhance digital marketing campaigns and automate engagement. OpenAI and ChatGPT is an artificial intelligence chatbot that can engage in dialogues on various topics and generate unique texts. The developer company is notable for its rapid growth and estimated market capitalization ($29 billion). In addition, Midjourney and DALL-E 2 stand out for their ability to create accurate images with text input. It is thought that these technologies can be used to increase the effectiveness of marketing campaigns and provide inspiration for new ideas. (Nesterenko, 2023:172-173).

Leszczynski, Salamon & Zieliński, (2022) divide the processes of using AI in advertising agencies into main and backup processes and successfully categorize the AI applications used in these processes. Wakratsas and Wang (2020) propose a Creative Advertising System (CAS) based on artificial intelligence (AI) principles for generating and testing creative advertising ideas. The conceptual framework of the proposed YRS is based on a perspective that defines advertising creativity as a broader search process, the results of which should be evaluated based on certain rules. This framework is designed to accommodate existing advertising concepts such as advertising templates and to explain the inconsistency of creative elements in terms of their effectiveness. By combining the produced and results-oriented perspectives, YRS aims to improve the thought processes of advertisers and advertising agencies on creative ad production. This process also offers a systematic way to address related challenges. The proposed system consists of four interconnected steps. These are knowledge development and monitoring, knowledge classification into styles, creative production using a set of transition rules, and creative testing using a combination of evaluation rules. This dynamic system requires constant updating with information from new ad campaigns due to the relative nature of creativity (Wakratsas and Wang, 2020).

Laurent Thevenet, Head of Creative Technology for Asia Pacific and MEA at Publicis, says that they regularly use Google Colab in prototyping work involving new AI algorithms such as Google Colab and Bard. Publicis is mentoring internally, sending updates on new technologies to its 4,000 creative employees across the region. Thevenet emphasizes that machines need operators and that people working on creative need to have hybrid skills that can think critically, operate and connect AI systems (Corbyn, 2023).

Nesterenko provides examples of how different companies are using artificial intelligence (AI) applications in advertising and explains their impact as follows:

- McDonald's: Use case; encouraging customers to visit their restaurants; impact; 168% reduction in unit price per visit.

- Best Western: Use case; personalization of advertising with the help of artificial intelligence

from IBM Watson Advertising; impact; 2.2x increase in customer engagement time and 48.6% increase in website traffic with sales

- CVS Pharmacy: Use case; attracting consumers in areas with high flu risk; impact; 42 million visitors to the website, 644 million ad impressions, 120% increase in click-through rate (CTR)

- Walgreens: Use case; identifying potential customers based on weather conditions; impact; 379.98% increase in in-store traffic with native ads

- TruGreen: Use case; create ads and optimize solutions based on collected user data; impact;Increase the CTR level by 4 times . Visitors stay on the site for 2 minutes longer (Nesterenko, 2023:172).

Perceived Ease of Use And Usefulness of Artificial Intelligence in Business Processes

The perceived ease of use and usefulness of AI in ad generation processes and other stages of marketing communication are still debated. According to Davis (1989), perceived usefulness is a concept related to the Technology Acceptance Model (TAM), a theoretical framework developed to understand how users accept and use new information technologies. Perceived usefulness refers to the user's subjective assessment of the degree to which they believe that using a particular system or technology will improve their job performance or make their tasks easier and more effective. Davis' work on perceived usefulness and perceived ease of use has been influential in the field of technology acceptance and adoption by providing insights into the factors that influence users' decisions to adopt or reject new technologies.

Nesterenko (2023) suggests that integrating AI into marketing strategies can have several advantages. These advantages include increasing the effectiveness of advertising campaigns, analyzing input data more efficiently, improving customer service, and achieving better financial results. Enache (2020) mentioned in his article the main advantages of using AI for marketing teams. These advantages are as follows: Cost reduction; saving time and resources by automating tasks. Expertise and solutions; with the use of AI, advertising agencies can provide expert solutions to complex problems. Creativity; with the contribution of AI, agencies can create innovative and effective advertising campaigns. Real-time optimization; with AI technologies such as programmatic advertising, marketing teams can make ads directed to the right audience at the right time. Personalized marketing; data analytics can improve campaign effectiveness by providing recommendations and targeted ads. Time efficiency; AI-based tools can save time in the management of advertising campaigns and make quick changes with effective analysis.

Wakratsas and Wang (2020) state in their article that the Creative Advertising System (CAS) they propose offers several potential benefits in terms of usefulness for the advertising industry. These benefits are explained as follows:

- First, YRS will help advertisers and advertising agencies to generate original and creative advertising ideas on a large scale. It will help unlock more resources for comprehensive testing of ads and accelerate their production.

- Secondly, the system can offer a more systematic approach to collecting information about existing ad ideas and tracking information development, making the system dynamic and constantly updated.

- Thirdly, YRS will help new and experienced creatives to understand that creativity is not an exclusive privilege, but rather a systematic process supported by data and calculation.

- Finally, the system can improve the current mindset of both advertisers and advertising agencies by providing them with a systematized process for creative ad production and dealing with the related challenges.

Leszczynski et al. (2022) suggest that artificial intelligence (AI)-based solutions can contribute to increasing operational efficiency and improving the quality of agency output. For example, AI can support the agency employee in tasks related to support processes, such as job planning coordination, calendar support, responding to messages, data analysis, data collection, classification and tracking, reporting, optimizing system resources, detecting anomalies, and predicting responses, or handle automated tasks instead. AI can also help businesses to adapt ads to customer needs and behaviors, analyze ad effects and improve support processes in agencies. In this way, work can be done in less time and results can be validated more efficiently. Overall, AI can help advertising agencies improve their operational efficiency by automating routine tasks, optimizing processes and informing decision-making.

Barriers to Integrating Artificial Intelligence

Nesterenko (2023) points out that there are potential drawbacks to consider when incorporating AI into marketing strategies. For example, there are concerns about the ethical implications of using AI in marketing. Furthermore, there is a lack of research on the effectiveness of AI-generated advertisements and consumers' views on these advertisements. Finally, the use of AI in marketing may require significant investments in technology and training for some companies, which appears to be a key barrier in the integration process.

Leszczynski et al. (2022) found that managers in advertising agencies are concerned about the possibility of using AI in their daily work, especially in supporting the creative process. This suggests that there is resistance to supporting the creative process with AI, which has traditionally been seen as a human activity. Furthermore, organizational and individual incompetencies, unclear responsibilities, and lack of interest in AI adoption were identified as the main challenges and risks in adopting AI technology in advertising agencies.

In their article, Kar, Kar & Gupta (2021) explain the barriers to adopting artificial intelligence (AI) in organizational strategy as follows:

- Lack of AI Strategy: The lack of an effective AI strategy hinders the successful adoption of AI in organizational processes.
- Lack of Technological Infrastructure: Existing legacy IT infrastructure is not suitable for the implementation of AI solutions, requiring integration and improvement with existing applications.
- Risk of Job Loss: There are concerns of firings and insecurity due to the potential impact of AI and automation on traditional job roles.
- Difficulty in Problem Selection: There are challenges in identifying appropriate use cases and validating the return on investment for AI solutions.
- Lack of Reusable Algorithms and Models: There are technical barriers to reuse of AI models for different problem scenarios and the need for continuous tuning and optimization.
- Lack of Usable Data: There are demands on the quantity and quality of data required for successful operation and the need for data cleaning and preparation.
- Lack of Ability to Use AI: There are barriers such as not knowing the potential applicability of machine learning techniques for a specific problem scenario.
- In Tariq, Poulin & Abonamah (2021), the main barriers organizations face when implementing AI for operational management are as follows:
- Lack of Strategic Planning: Organizations often face challenges due to a lack of clear strategic planning for AI adoption. This can lead to difficulties in realizing the benefits and efficiency of AI.
- Cultural Constraints: Resistance to change and a preference for traditional methods, operational management can also be a barrier to AI adoption.

- Fear of the Unknown: Fear among employees of losing control over their tasks and the potential impact of AI on job roles can hinder the adoption of AI technologies.

- Lack of Skills and Expertise: Lack of technologists with the necessary training and experience can hinder the fundamental organizational change needed for AI adoption and implementation.

In general, the main barriers to integrating AI into business processes are: not knowing which strategy to use (Kruhse-Lehtonen & Hofmann, 2020; Olsen & Tomlin, 2020); lack of usable data (Baryannis, Validi, et al., 2019); concerns about threatening jobs (Nam, 2019), cultural reasons (Tarafdar, Beath & Ross, 2019) and lack of skills (Lee et al., 2018).

Lichtenthaler (2020) mentioned in his article that companies can use several strategies to address employee skepticism and fears about AI. These include emphasizing the combined use of human intelligence and AI, communicating the scope and direction of AI initiatives and providing ample opportunities for testing and familiarization. It is also claimed (Kar, Kar & Gupta 2021) that AI adoption barriers can be effectively addressed and overcome through developing a comprehensive AI strategy, investing in infrastructure and also addressing job security concerns.

Attitudes Towards Using Artificial Intelligence in Business Processes

The integration of artificial intelligence (AI) into business processes has begun to dramatically change the way organizations operate. While AI offers unique opportunities to improve efficiency, decision-making and overall performance, this transformative technology also has the capacity to analyze large data sets, identify patterns and generate important insights. From automating routine tasks to predicting market trends, AI is optimizing many processes and enabling companies to allocate resources more effectively. However, this transformation presents a number of challenges and requires a balanced approach to address issues of ethics, privacy and organizational impact. While strategic adoption of AI promises significant benefits, intelligent, data-driven business operations are ushering in a new era of industry. In this process, attitudes towards incorporating AI into business processes are also important. Integrating AI technologies into business processes, especially for managers, involves learning and motivation to adapt to new technologies. Therefore, the importance of attitudes towards artificial intelligence plays a major role here. There is a limited literature in the literature to understand people's technology avoidance behavior. Within this literature, the most cited study is the Technology Threat Avoidance Theory (TTAT) by Liang and Xue (2009; 2010).

The Unified Theory of Acceptance and Use of Technology (UTAUT) is a widely used model for understanding the acceptance and use of new technologies. For a comprehensive study on this model, see (Williams, Rana & Dwivedi, 2015). UTAUT2 is an extension of the original UTAUT model, incorporating additional factors to better explain and predict user intentions and behaviors around technology adoption. UTAUT2 modeli, includes factors such as performance expectancy, effort expectancy, social influence, facilitating conditions, hedonic motivation, price value, and habit, which collectively influence behavioral intention and actual usage behavior. In the articles by Gansser and Reich (2021), additional influencing factors added to the UTAUT2 model include health, convenience, sustainability, safety, and personal innovativeness. These factors were incorporated into the UTAUT2 model to investigate their impact on the behavioral intention and usage behavior of products containing AI in everyday life.

Cao, Duan, Edwards & Dwivedi (2021) developed a model that examines managers' attitudes and intentions towards the use of artificial intelligence (AI). This model, called the AI acceptance-avoidance model (IAAAM), aims to explain managers' attitudes towards the use of AI by combining positive and negative factors. Based on a large-scale survey of 269 business managers in the UK, the research contributes both

conceptually and empirically to the literature on the use of AI for organizational decision-making, while in practice it emphasizes the importance of developing appropriate conditions, alleviating personal concerns, and balancing the advantages and disadvantages. According to Schuetz and Venkatesh (2020), machine learning systems operate as a "black box" and can behave in unexpected ways.

The Technology - Organization - Environment (TOE) found that the firm's decision to adopt an innovation is not only based on technological factors but is also influenced by organizational and environmental contexts. As the name suggests, the TOE framework analyzes a firm in three different dimensions. These are technology, organization and environment. The technological dimension includes all relevant technologies available inside and outside the firm. The organizational dimension describes business characteristics and resources that can influence the adoption process, such as firm size, management structure, decision making and communication. The environmental dimension includes the structure of the industry, the firm's competitors, suppliers, customers and the regulatory environment (Tornatzky & Fleischer, 1990). Vasiljeva, Kreituss & Lulle (2021) in their article explain the main factors influencing general and business attitudes towards AI as technological factors such as cost effectiveness and relative advantage, organizational factors such as top management support and departmental preparations, and social factors such as trust. The study also extends the technology-organization-environment framework (TOE) model by adding a new group of social factors and two new technological factors. The authors suggest that understanding and addressing these factors can help reduce negative attitudes towards AI and promote successful adoption in various industries (Vasiljeva et al., 2021:12-13).

Shank et al. (2022) tested the hypothesis that music produced by artificial intelligence would be less liked by humans and the findings supported this. In the study, participants liked the music less when they thought it was composed by AI. The study by Argan et al (2022) on understanding social media users' behavior towards Artificial Intelligence (AI)-based ads suggests that brands using AI advertising technologies to positively influence consumer attitudes should show empathy towards consumers and consider a user-centered perspective to achieve effective results.

The findings of Vasiljeva et al. (2021) have important implications for AI adoption and perceptions of AI in various industries. First, the study reveals that attitudes towards AI differ significantly across industries, suggesting the need for industry-specific approaches to AI adoption. Second, the research identified three main factors that influence AI adoption in organizations. These are senior management attitude, competition and regulations. Understanding and addressing these factors is thought to help organizations deal with the challenges they will face in the process of adapting to AI. The article confirms the theory that senior management support influences departmental readiness to adopt AI and vice versa.

Exploratory Research

To assess the extent of AI utilization in advertising agencies, exploratory qualitative research was undertaken through individual in-depth interviews. Semi-structured interview script designed to discover the processes in which AI technologies are employed, and to learn about users motivations towards technology. The interview script was guided by following factors which have proven to be influential on users acceptance of technology: perceived usefulness of AI in advertising agencies, perceived ease of use, attitudes and reactions of professionals and also barriers preventing or restricting the use of technology (Marangunic & Granic, 2015).

In this study, ethics committee permissions were obtained by considering the Research Ethics Directive of Yozgat Bozok University and with the approval of the ethics commission of Yozgat Bozok University Turkey. The participants included in the research were included in the research

with their own consent. Voluntary consent forms were signed by the participants. The identities of the participants were not disclosed and coded according to their professions and given in the text. Participants were included in the study using convenience and snowball sampling methods. The sample includes two founders of AI based startups, three managers working in the Turkey branch of global networks, one manager and a data analyst from a local media planning agency and finally one manager from an independent local creative agency. Different profiles of participants working in variety of structures ensure the diversity of views obtained on AI technology.

It is important to note that generalizability in snowball sampling is minimal, however the aim of the research is, in addition to presenting some initial insights on the use of AI technologies, to reveal different perspectives and attitudes towards AI Technologies in advertising sector in Turkey (Brewerton & Millward, 2001).

As a result of the interviews with agency professionals, it is seen that artificial intelligence is utilized for various purposes and intensities in agencies in different areas of the advertising sector. While support is received from artificial intelligence in processes related to the organization of work, such as translation and transcription of meeting notes, it is also used in media planning and creative production. While some participants say that they are systematically and actively utilizing technologies, others seem a bit more cautious about making AI an integral part of their business processes, stating that they are still in the testing and exploration phase. The words of one participant summarize this situation as follows: *We tried an AI tool in a campaign there were parts that worked well, and parts that wouldn't go that well. Maybe we can continue with AI all the time, or maybe we will go with AI half the time*.

AI is utilized in many different areas of advertising industry. It is found useful in creative production and for providing efficiency in business processes: "They are just tools which enable us to create faster..." One participant also underscored that "with the temporal efficiency that AI will provide, more space can be created for strategic thinking". In addition to content production, AI tools are said to automate media planning besides "providing fast solutions in the optimization of creative content". Despite this, one participant argued that the old approach to media planning for traditional media continues: "*Because of the nature of it, AI has been integrated into digital planning to a significant extent, but there are still underdeveloped parts, for television, radio, there is still a planning process as before.*" Another point put forward where artificial intelligence is useful is that it can "develop behavioral models instead of cookies without accessing users' personal information", thus bringing an innovative targeting method to the advertising industry.

All respondents' attitudes were positive regarding the implementation of AI services in agencies. Specifically, one manager in a global network expresses readiness for AI to be involved in any area that will improve efficiency and quality: "*If we can solve the tasks we constantly automate with AI, let's solve them that way. If that means we should have more qualified work force, so be it*." Another participant, the founder of an AI based startup, reports that AI is already integrated into all business processes in agencies highlighting that "A process management without AI is not possible, from image processing to machine learning, from visual production to sound production..." An executive at another global network underlines that AI is not a passing fad for the industry and is "here to stay" : "Rejecting it doesn't make sense to me, I think using AI isn't temporary for agencies, it's permanent."

A frequent point raised by the participants regarding the implementation of AI in agencies is the collaboration between human and AI tools. This is in line with the findings of Leszczynski,

Salamon and Zielinski (2022). Remarkably, one participant expresses the importance of the collaboration between AI and humans in the following words: "*Human control is still esential in business processes. A more advanced approach is needed that reads the data correctly and holistically. It's like adding a metal collar to a white collar. Those who can digest the combination of two will have an advantage.* Another participant stated that although it is utilized in work processes, artificial intelligence has not yet developed to the extent that it excludes the human factor and that the human touch is still important: "*AI gives you suggestions but it still needs human intelligence, human is there to operate AI*."

Most of the participants stated that they found new technologies easy to use. As stated in the literature, participants who find artificial intelligence tools useful and easy to use also have positive attitudes towards these tools (Davis, 1989). Two participants reported that they used to make choices between filters and layers in creative content production and had to carry out this process manually. However, now they argue that it is a great convenience to have artificial intelligence produce by using prompts: "*You write a sentence and it creates visual for you. In Photoshop there are thousands of options, brushes to choose from, it is very difficult*." Another participant stated that anyone who is interested in technology will adapt easily, but the deeper you go into the subject, the more difficult things can get: *If you want to get more of it, you should know more as well.* Even a participant who does not seem to use AI very often does not find it difficult to learn: "*I think they can be learned if you put a little thought on them*."

The research also examined participants' attitudes towards artificial intelligence. Most respondents have a positive attitude towards AI. One participant describes the importance of AI for his company as follows: *Without AI, we would be an ordinary, inefficient company that needs hundreds of employees*. Another participant defines artificial intelligence as "something wonderful, something that makes life easier". Although respondents had a generally positive attitude towards artificial intelligence one participant was a bit skeptical about it: *AI needs to update its own software, you cannot deliver optimization to something in the testing phase*.

It is seen that there are some barriers to the use of artificial intelligence in agencies. There is a prevailing view among the participants that AI is avoided in the advertising industry and that there is a skeptical attitude towards these technologies. One participant specifically stated that some clients find it difficult to give up old approaches. Another participant similarly described the situation as "we are resistant to accept innovation". Two participants argued that in order to fully utilize technologies, competent human resources are needed in this field. The rules set by global structures can also be decisive in this context. The words of a manager in a global network in this regard are particularly noteworthy: "*We can't use the images produced with AI in our campaigns, there are uncertain areas in terms of copyright etc. so we can't use them*."

Discussion

It is seen that the participants generally have a positive attitude towards the impact of artificial intelligence on their professions. It is noteworthy that all of the participants can give examples of AI-based solutions within their own fields and their awareness in this field is high. Nevertheless, it is noteworthy that a participant with an engineering background was able to indicate more use cases than other participants. This suggests that professionals' educational backgrounds may be determinative on their use of AI.

In Turkish agencies in Istanbul, AI is used in core processes such as media planning, campaign optimization, and creative production, as well as support processes such as meeting notes (Leszczynski et al. 2022). Within the framework of the interviews, it is understood that visual production is one of the areas where artificial intelligence is frequently utilized. Artificial intelligence is utilized both in the creation of key

and draft visuals. This contradicts the literature, which reveals that the role of AI in the creative process is not clearly understood (Leszczynski et al., 2022 & Zerfass et al. 2020).

As the in-depth interviews show, agencies providing various services in the advertising sector are effectively utilizing AI today. Nevertheless, it is observed that AI is not fully integrated into agencies and that testing processes for technologies are still ongoing. In other words, while traditional methods are still valid in agencies, artificial intelligence tools are frequently utilized due to their contributions to speed and efficiency.

None of the participants expressed any concern that AI would take away their jobs. In the in-depth interviews, it is understood that AI is seen by agency professionals as a tool to increase human efficiency in business processes. In this context, the importance of collaboration between AI and humans is emphasized. It can be stated that the fact that artificial intelligence is not seen as a threat to the participants, in addition to its usefulness, positively affects the intention to use technology and the attitude towards technology. It should be noted that only one participant mentioned that AI helps to produce more creative and higher quality work when evaluating its usefulness (Yu, 2021), while the other participants discussed AI in terms of its contributions to speed and efficiency. It can be argued that this finding confirms the participants' belief that AI cannot replace human work force.

AI tools are found both user friendly and useful. As a result of this convenience, interviewees also have a positive attitude towards incorporating AI applications into their work. AI is seen important for the future of the advertising industry. Many respondents argued that there are barriers to using AI technologies. The most frequently mentioned barrier is that advertisers are skeptical of these technologies. There is a perception of uncertainty and traditionalism in the minds of advertisers. On the other hand, it is seen that the agency structure in which agency professionals work can have an impact on the barriers put forward. It is understood that the rules set by large global structures for the use of artificial intelligence may restrict the utilization of technologies.

Table 1

Advertising Agency Employees' Perceptions of Artificial Intelligence

Usefulness	**Ease of Use**	**Barriers**	**Attitudes**
*Translation, script-writing	*User-friendly applications	*Resistance to accept innovation	*The belief that it will reduce the human workload, make life easier
*Streamlining marketing communication processes	*Easier than learning to use a program	*Regional constraints cost of implementation	*The view that it will work in partnership with human beings
*Increasing internal efficiency and effectiveness	*Easy interface that works by command	*Cultural barriers	*The belief that it has not yet achieved full performance
*Reducing costs		*Fear of uncertainty	* The belief that it is a permanent application rather than a temporary one
*Making creative optimization efficient		*Personal barriers	*The belief that human intelligence is still needed
*Speeding up work		*Organizational barriers	
		*Ethical concerns	
		*Human resource barriers	
		*Customer demands and expectations	

Note: This table was developed by the authors based on the findings.

Conclusion

It is predicted that AI technologies will take more and more place in the lives of individuals in both daily and professional life. This article sheds light on the current climate in advertising field regarding agencies' adoption and acceptance of AI technologies. It is understood that agencies operating in the advertising sector in Turkey have started to use AI softwares at varying degrees to fulfill different tasks. AI tools are found both useful and easy to use by agency practitioners, as a result of this, general attitude towards AI seems to be positive. Despite actively using AI softwares, testing and discovery processes seem to continue in the background. Skepticism among advertisers seems to be a crucial issue that needs to be tackled. It may be argued that in the long run, agencies which ignore the developments in the field of AI, and which fail to familiarize themselves with AI tools, may find it difficult to reciprocate the increasing demand for efficiency. For this reason, businesses are advised to take initiatives to adapt to new developments.

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Genişletişmiş Özet

Günümüzde yapay zekâ (YZ) teknolojileri giderek yaygınlaşmakta ve reklamcılık alanı da dâhil olmak üzere çeşitli sektörleri etkilemeye başlamıştır. Son yıllarda pazarlamacılar ve reklamcılar, daha fazla dönüşüm sağlamak, kritik içgörüler elde etmek ve kampanya optimizasyonlarını iyileştirmek için yapay zekâ destekli ürünleri kullanmaktadır. Özellikle kreatif tasarım söz konusu olduğunda, üretken yapay zeka ile ilgili haberlerde son zamanlarda yaşanan artış, insan faktörünün rolünü her geçen gün yeniden yapılandırma ihtiyacını vurgulamaktadır. Buna ilaveten yine son yıllarda pazarlamacılar ve yaratıcı ekipler, kullanıcı deneyiminden reklam envanterine kadar çeşitli alanlarda yapay zekâ denemeleri yapmaktadır. Bunlardan biri de sesle etkinleştirilen ve görsel/işitsel deneyimler sunan etkileşimli reklamlardır. Bu reklamlar, kullanıcıların deneyime katılmasına olanak tanımaktadır. Ancak bu teknolojilerin kullanımında insan merkezliliğin unutulmaması gerektiği ve insan gerçekliğinin kampanyaların merkezine yerleştirilmesinin önemi de giderek vurgulanmaya başlamıştır.

Bu mevcut makale, Türkiye'de reklam sektöründe yapay zekânın benimsenmesi ve kabul edilmesinin arkasındaki mekanizmaları keşfetmeyi amaçlamaktadır. Teknoloji kabul literatürünü yansıtan yarı yapılandırılmış görüşmeler ile yapay zekâ destekli uygulamaların kullanımlarını ve kullanım koşullarını keşfetmek için ajans uygulayıcıları ile mülakatlar gerçekleştirilmiştir. Katılımcılar, kolayda ve kartopu örnekleme yöntemlerine uygun olarak seçilmiştir. Sonuçlar, literatürün dört ana başlığına ilişkin önemli içgörüler sağlamaktadır. Bunlar: Teknoloji kullanışlılığı, kullanım kolaylığı, yapay zekâ teknolojilerine yönelik tutumlar ve bu teknolojilerin kullanımını engelleyen ve kısıtlayan bariyerlerdir.

Araştırma bulguları şu yöndedir:

Teknolojik Kullanışlılık ve Kullanım Kolaylığı: Katılımcılar, yapay zekanın yaratıcı prodüksiyon ve medya planlamasında verimliliği önemli ölçüde artırdığını vurgulamaktadır. YZ araçları, çeviri, transkripsiyon ve yaratıcı içeriğin optimizasyonu gibi süreçleri kolaylaştırma becerileri nedeniyle övülmektedir. Algılanan kullanım kolaylığı yüksektir, katılımcılar yapay zekâ uygulamalarının kullanıcı dostu olduğunu ve projelerin daha hızlı tamamlanmasını sağladığını belirtmiştir.

YZ'ye Karşı Tutumlar: Ajans profesyonellerinin YZ'ye yönelik genel tutumu olumludur. Katılımcılar, YZ'nin insan yaratıcılığını ve stratejik düşünmeyi artırma potansiyelini kabul etmektedir. YZ'nin insan işlerinin yerini almayacağına, ancak insan zekâsı ile sinerjik bir şekilde çalışacağına dair güvenlerini ifade etmektedirler. Bu güven, YZ'nin rutin görevlerin üstesinden gelebileceği ve insanların işlerinin daha stratejik ve yaratıcı yönlerine odaklanmalarına izin verebileceği inancına dayanmaktadır.

YZ'nin Benimsenmesinin Önündeki Engeller: Olumlu bakış açısına rağmen, çeşitli engeller yapay zekânın reklam ajanslarına tam entegrasyonunu engellemektedir. Reklam verenler arasındaki şüphecilik ve değişime karşı direnç öne çıkan konulardır. YZ'nin etik sonuçlarına ilişkin endişeler, kalifiye personel eksikliği ve telif hakkı ve veri gizliliği ile ilgili belirsizlikler, YZ'nin benimsenmesini daha da zorlaştırmaktadır. Ayrıca, özellikle televizyon ve radyo için medya planlamasındaki organizasyonel kısıtlamalar ve geleneksel yaklaşımlar, YZ'nin uygulanmasını sınırlamaktadır.

Çalışmanın bulguları, teknolojinin benimsenmesinde algılanan yararlılık ve kullanım kolaylığının önemini vurgulayan mevcut literatürle uyumludur. Yapay zekâya yönelik olumlu tutum, artan verimlilik ve yaratıcı çıktı gibi pratik faydalarından etkilenmektedir. Bununla birlikte, şüphecilik, etik kaygılar ve örgütsel direnç gibi engeller, YZ entegrasyonuna daha stratejik bir yaklaşım ihtiyacını vurgulamaktadır. Katılımcıların eğitim geçmişleri ve ajans yapıları, tutumlarını şekillendirmede ve YZ teknolojilerini benimsemeye hazır olmalarında önemli bir rol oynamaktadır. YZ'yi aktif olarak benimseyen ajanslar, verimlilik ve iş kalitesinde önemli gelişmeler olduğunu bildirmektedir. Bununla birlikte, devam eden test ve keşif aşamaları, YZ'nin henüz iş süreçlerine tam olarak entegre edilmediğini göstermektedir.

Yazar Bilgileri

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